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US EPA RECORDS CENTER REGION 5



**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**NAVISTAR INTERNATIONAL TRANSPORTATION
CORPORATION
TRUCK ASSEMBLY FACILITY
SPRINGFIELD, OHIO
OHD 049 654 120**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

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EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Navistar International Transportation Corporation (Navistar) Truck Assembly facility in Springfield, Ohio. This report summarizes the results of the PA/VSI and evaluates the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritization of RCRA facilities.

The Navistar facility covers about 500 acres and has roughly 4,400 employees. Navistar assembles medium and heavy duty trucks; operations have remained basically the same since the facility's startup in 1966. Navistar currently operates as a generator with less than 90-day storage of mainly solvents and waste paint material.

The PA/VSI identified the following nine SWMUs and two AOCs at the facility:

Solid Waste Management Units

1. Hazardous Waste Storage Area
2. South Tank Farm
3. Sludge Rolloff
4. Satellite Accumulation Areas
5. Incinerator
6. Old Drum Storage Areas
7. Bulk Tank Farm
8. Waste Pile Area
9. Wastewater Treatment Plant

Areas of Concern

1. North Tank Farm
2. Old North Tank Farm

A release to ground water and on-site soils has occurred at the Navistar facility. Monitoring wells in the vicinity of the South Tank Farm (SWMU 2) first revealed the presence of volatile organic compounds (VOC) in the ground water in 1983. Since that time, a number of studies concerning the underground storage tanks at Navistar have been conducted but have proved inconclusive. Current monitoring well data indicates that no ground-water contamination has migrated off site. Ground water is used as the primary source of drinking water for Springfield, Ohio, and the surrounding area. Springfield's ground-water wells are located about

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2.8 miles downgradient from the site. Under an Ohio Environmental Protection Agency consent decree, Navistar is conducting a remedial investigation/feasibility study (RI/FS) at the site to characterize the extent of contamination.

The potential for release of hazardous constituents from Navistar to surface water is moderate. The facility has exceeded its National Pollutant Discharge Elimination System (NPDES) permit numerous times.

Navistar has 36 air permits mainly for paint systems. The potential for releases of hazardous constituents to air is low because of a sound volatile organic compound (VOC) collection system.

Receptors of the releases from the facility include any organism coming in contact with contaminated ground water, surface water, or soil. There are about 50 people living within 1 mile of Navistar. All surrounding receive drinking water from the City of Springfield. The site is surrounded by a 6-foot, steel, chain-link fence and is monitored 24 hours per day by security personnel. No sensitive environments are near the site.

PRC recommends that the RI/FS at Navistar be reviewed for completeness. The report should give a thorough description of the nature and extent of the contamination, as well as fate and transport patterns. Additional sampling or monitoring may be required after this review.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Navistar International Transportation Corporation (Navistar) truck assembly facility in Springfield, Ohio. The PA was completed on June 6, 1991. PRC gathered and reviewed information from Ohio Environmental Protection Agency (OEPA) and EPA Region 5 RCRA files. The VSI was conducted on June 13, 1991. It included interviews with Navistar facility representatives and a walk-through inspection of the facility. Nine SWMUs and two AOCs were identified at the facility.

PRC completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and 12 inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, release history, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

The Navistar facility is located about 5-1/2 miles north of Springfield, Ohio, in Clark County (see Figure 1). The site's main entrance is from U.S. Route 68, east of the facility. The site is bordered to the south by farmlands, to the west by Penn Central railroad tracks and farmland, and to the north by County Line Road, which is the border between Clark County and Champaign County border.

2.2 FACILITY OPERATIONS

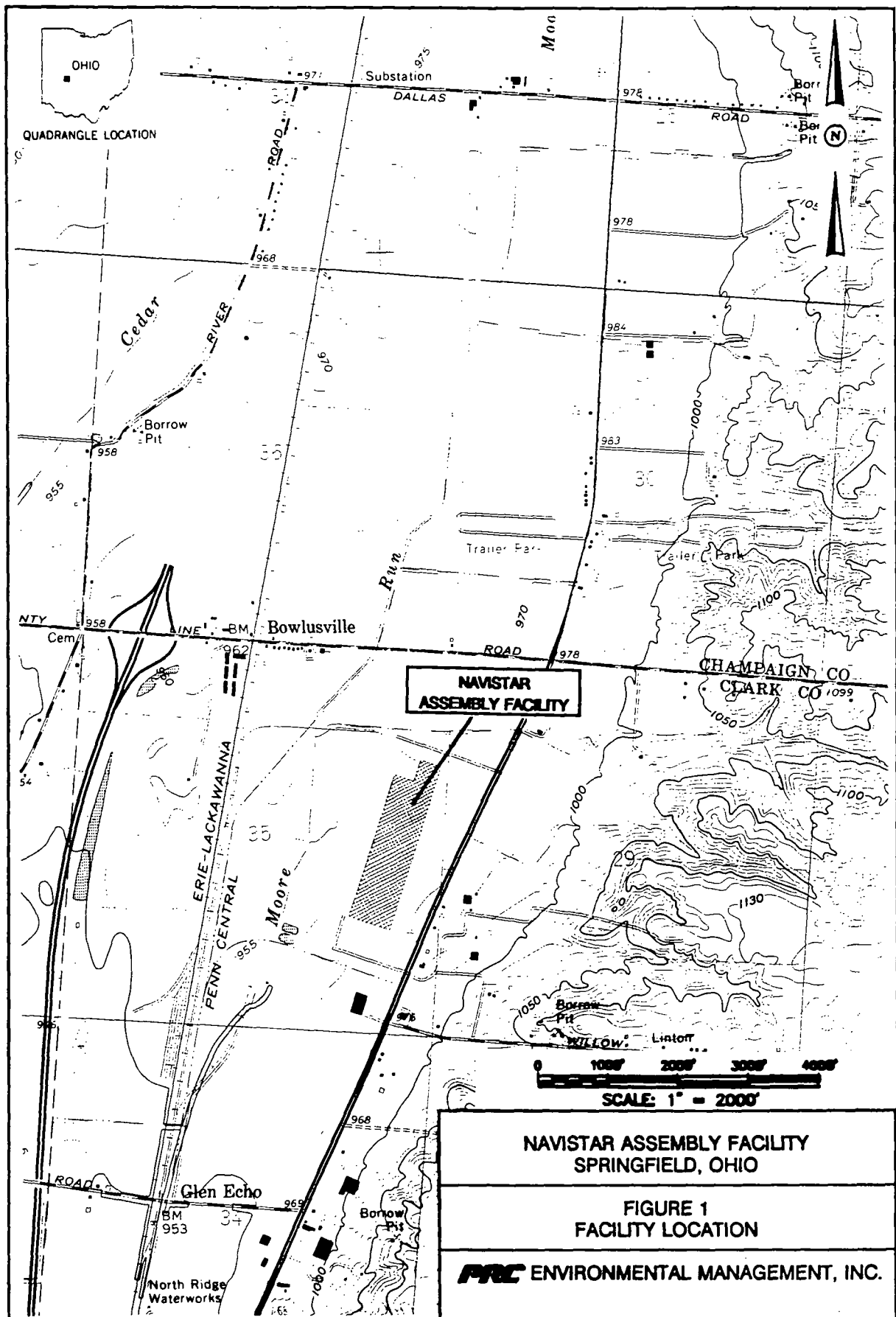
The Navistar facility covers an area of about 500 acres; about 2.2 million square feet of this area is indoors. The facility assembly area was constructed by International Harvester Corporation (IHC) in the mid-1960's, and operations began in 1966. A high-rise parts warehouse was constructed in 1981, and the corporate name was changed to Navistar International Transportation Corporation in 1986. A finishing plant was constructed at the site in 1987, and an aboveground bulk tank farm went on-line in late-1991 (see Figure 2) (McDaniel, 1991a and 1992).

Navistar assembles medium and heavy duty trucks at the facility. It employs about 4,400 people over three shifts and currently produces 329 finished vehicles per day. Most parts arrive at the facility ready to be assembled and painted. Little machining is performed at the site. Most of the finished vehicles leave the site, although Navistar operates a truck sales operation at the facility's south end.

PRC identified nine SWMUs at the facility and two AOCs. SWMUs are listed in Table 1.

2.3 WASTE GENERATING PROCESSES

Waste streams generated at the Navistar facility include wastewater and wastewater sludges, waste paint related material, waste cleaning solvents, waste oils, and metallic grinding sludge (McDaniel, 1991a) (see Table 2).



SOURCE: USGS 7-1/2 Minute Topographic Quadrangle Map, Urbana West, Ohio, 1983

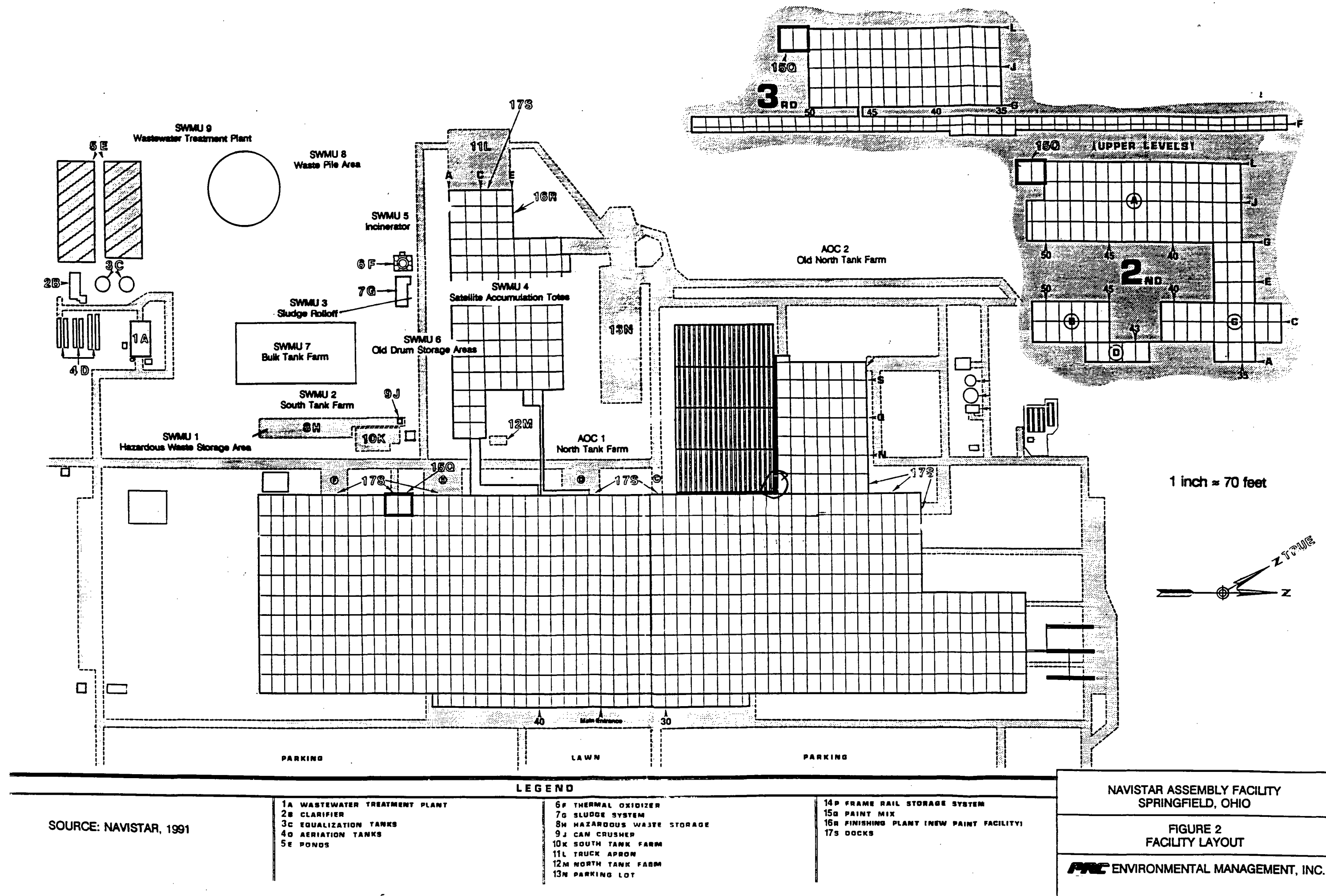


TABLE 1
SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Hazardous Waste Storage Area	Yes	Active
2	South Tank Farm	Yes	Active/pending closure in 1992
3	Sludge Rolloff	No	Active
4	Satellite Accumulation Areas	No	Active
5	Incinerator	No	Active
6	Old Drum Storage Areas	Yes	Inactive
7	Bulk Tank Farm	No	Active
8	Waste Pile Area	No	Active
9	Wastewater Treatment Plant	No	Active

Note:

* A RCRA hazardous waste management unit is one that currently requires or previously required a RCRA Part A or Part B permit.

TABLE 2
SOLID WASTES

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Primary Management Unit*</u>
Wastewater	Paint Systems, Sanitary Sources, Industrial Operations	9
Wastewater Sludges	Paint Systems, Sanitary Sources, Industrial Operations	1, 4, and 9
Waste Paint Related Material/ (D001, D008, F003, F005)	Paint Systems	1, 2, and 7
Waste Cleaning Solvents/ (D001, F002)	Metal Cleaning, Paint	1, 2, 4, and 7
Waste Oils	Engine Testing, Lubrication	1, 2, and 7
Metallic Grinding Sludge	Parts Machining	1

Note:

* Primary management unit refers to a SWMU that currently manages the waste.

Wastewater is generated at the facility from sanitary, industrial, and paint priming or electrodeposition (E-coat).

Sanitary wastewater is typical domestic wastewater. It is sent to the Wastewater Treatment Plant (SWMU 9) for aeration, sedimentation, and disinfection. Once equalization is reached, the treated water is pumped to Moore's Run, a small stream located just west of Navistar. Sludge resulting from these processes is periodically pumped from the clarifiers and removed from the site by Environmental Engineering Services (EES). EES has a contract with Gainer Seed Farm in Champaign County, Ohio, to land apply the sludge (Navistar, 1992).

Before becoming industrial wastewater, paint process water is subjected to a process called detakification. Detakification is a chemical process that keeps paint particles in the process water from sticking to surfaces or clumping together. This creates a sludge that is removed from the water at various locations throughout the facility and added to Satellite Accumulation Areas (SWMU 4) and the Sludge Rolloff (SWMU 3). After detakification, most of the process water reenters the paint system for reuse. Process water discharged to the Wastewater Treatment Plant (SWMU 9) is classified as wastewater. Industrial wastewater is also generated from oil and solvent sources throughout the main Navistar building. All industrial wastewater is directed to SWMU 9.

E-coat wastewater is generated from the paint priming process. It is pumped directly to the Wastewater Treatment Plant (SWMU 9) for batch treatment. After batch treatment, the E-coat wastewater is combined with industrial wastewater for further treatment (Navistar, 1992).

Waste paint related material includes scrap and expired paints, scrap paint pails, paint filters. This material is from various paint and maintenance operations throughout the plant. Depending on the material, the amount for disposal, and its consistency, the waste is either drummed and sent to the Hazardous Waste Storage Area (SWMU 1) or added to a tank at the Bulk Tank Farm (SWMU 7) (the South Tank Farm was for bulk accumulation until late 1991). Waste paint material is removed from the site within 90 days for either incineration or fuels blending.

Navistar generates a wide variety of waste solvents from painting operations and metal cleaning. These solvents include mineral spirits, 1,1,1-trichloroethane, methyl ethyl ketone, acetone, naphtha, and xylene. Depending on the amount generated, the waste solvents are either drummed and sent to the Hazardous Waste Storage Area (SWMU 1), added to totes in the Satellite Accumulation Areas (SWMU 4), or directed to the Bulk Tank Farm (SWMU 7). All waste solvents are sent to various treatment facilities for reclamation.

Waste oils are generated at the facility from engine testing and the exchange of lubrication fluids. These fluids include transmission fluid, brake fluid, antifreeze fluid, and sealing fluids. The fluids are either drummed or directed to the Bulk Tank Farm (SWMU 7), and eventually removed from the site for either reclamation or fuels blending, depending on the grade of material.

Small amounts of nonhazardous metallic grinding sludge are generated from machining of parts. This material is loaded into drums, staged in the Hazardous Waste Storage Area (SWMU1), and eventually removed from the site for disposal in an industrial landfill.

2.4 RELEASE HISTORY

Documentation for the Navistar facility indicate that surface spills of mineral oil, diesel fuel, transmission fluid, and antifreeze have occurred in the vicinity of the North Tank Farm (AOC 1) and the South Tank Farm (SWMU 2) throughout the 1980's. Both farms are composed of USTs and are located west of the main Navistar building (ERM, 1989). Because the tank farms have been used since 1966, it is probable that spills also occurred during the late 1960s and 1970s.

In 1980, for undocumented reasons, Navistar installed four ground-water monitoring wells between the South Tank Farm and North Tank Farms. In September 1983, OEPA collected ground-water samples from the wells, and the analysis revealed the presence of xylenes, ethylbenzenes, and trimethylbenzenes in the South Tank Farm area (ERM, 1989).

A study by Bowser-Morner, Inc. (BMI), in 1985, revealed not only the presence of the contaminants discovered in 1983, but also toluene and acetone. BMI's final report concluded that the contamination around the South Tank Farm was probably the result of surface spills (ERM, 1989). Soil surrounding the South Tank Farm was eventually removed to the Waste Pile Area (SWMU 8). In response to the above-mentioned spills and OEPA requests, Navistar is currently performing a remedial investigation/feasibility study (RI/FS) at the site.

During January 1989, in the vicinity of the Bulk Tank Farm (SWMU 7) construction zone, an underground pipe ruptured and released from 1,500 to 2,000 gallons of diluted E-coat. About 55 gallons of liquid material was contained, and contaminated soil was immediately excavated and placed in a lined holding area (OEPA, 1990). The contained waste liquid was eventually sent through the Wastewater Treatment Plant (SWMU 9) and the contaminated soil was sent to Ecolotec, Inc., in Dayton, Ohio for disposal (Navistar, 1990a). No documentation could be located indicating the OEPA fully accepted this procedure.

A release from the Navistar Wastewater Treatment Plant (SWMU 9) to on-site soils occurred during December 1990, when a storage tank overflowed. The overflowed material consisted of from 400 to 500 gallons of untreated industrial wastewater (Navistar, 1992). The majority of the material flowed into one of two settling lagoons at SWMU 9 (Navistar, 1990b). No documentation could be located indicating an OEPA investigation of this release.

During a 5-year span in the mid- to late-1980s, Navistar violated its 1981 National Pollutant Discharge Elimination System (NPDES) permit parameter limitations over 400 times (all NPDES outfalls release to Moore's Run). About 75 percent of the violations were for releases of suspended solids; most of the remaining violations were for exceedance of Navistar's biochemical oxygen demand (BOD) parameter. In January 1991, because of the violations, the Natural Resource Defense Council (NRDC) threatened to file a lawsuit against Navistar (Navistar, 1992). Navistar failed to renew its 1981 permit when due and claimed that the suspended solid releases were because of an increase, over the 1980s, in the average amount of water leaving the plant per day. With a permitted increase in average flow, most of the suspended solids violations of mass limits would no longer occur. OEPA has become involved and the case is still pending (Hull, 1991). It should be noted that a new NPDES permit was issued to Navistar in August 1991 (Navistar, 1992).

2.5 REGULATORY HISTORY

In 1980, IHC filed a Part A permit application to OEPA as a treatment, storage, and disposal facility (OEPA, 1981). The permit included listings for wastewater treatment and storage tanks and drums. As mentioned in Section 2.4, in September 1983, OEPA sampled ground-water monitoring wells and detected organic contamination near the South Tank Farm (SWMU 2). OEPA immediately instructed IHC to sample the wells weekly and to investigate for the source of contamination (ERM, 1989).

During March 1984, OEPA inspected the IHC facility in response to a charge that hazardous waste had been shipped to an unpermitted waste handling facility and that a portion of the waste had leaked onto a roadway. The inspection revealed that IHC did not possess a comprehensive waste management plan (OEPA, 1984a). OEPA held a meeting with IHC to address regulatory deficiencies at the facility, and under a consent order, fined the company 10,000, mainly for improper shipment of wastes (OEPA, 1984b).

In early 1985, IHC submitted a revised Part A permit application to OEPA, changing its status to generator with less than 90-day storage. In April 1985, after an investigation of the facility, OEPA granted the change in status (OEPA, 1985).

In July 1985, in accordance with an approved OEPA workplan, IHC removed the contaminated soil from the vicinity of the South Tank Farm (SWMU 2). The soil was placed on site in Waste Pile Area (SWMU 8) (IHC, 1987). As mentioned in Section 2.2, in January 1988, through corporate restructuring, the company name changed from IHC to Navistar.

During April 1987, to define the extent of contamination at the site, OEPA and Navistar entered into consent agreement discussions for an RI/FS. In 1988, Navistar contracted ERM-Midwest, Inc. (ERM), to perform the required work. In May 1988, a consent decree was finalized and the RI/FS statement of work (SOW) was approved by OEPA (ERM, 1989). The main goal of the RI/FS is to characterize soil and ground-water contamination in the vicinity of the South Tank Farm (SWMU 2), the North Tank Farm (AOC 1), and the Old North Tank Farm (AOC 2). The first RI/FS report was submitted to OEPA in July 1991.

IHC was first issued an NPDES permit in November 1974 (IHC, 1974). The permit required monitoring and discharge limits for the following parameters:

- total suspended solids (TSS)
- biochemical oxygen demand (BOD)
- dissolved oxygen (DO)
- fecal coliform
- pH
- flow
- temperature

As mentioned in Section 2.4, Navistar failed to renew its NPDES permit after 1981, and the facility has had ongoing problems with water releases. In 1985, Navistar received a permit to install from OEPA for upgrades and improvements for the NPDES system (Navistar, 1992). Environmental managerial changes were made at the facility in the late 1980s, and a revised 29 page NPDES permit application was submitted to OEPA. The expanded permit included inorganic monitoring, organic monitoring, biomonitoring, and monitoring and discharge limits for most of the parameters listed on the 1974 permit. The permit lists 12 NPDES outfalls, mainly for stormwater discharges. All of the outfall empty into Moore's Run, a small creek on the western edge of the site (McDaniel, 1991b). A new NPDES permit was issued to Navistar in August 1991 (Navistar, 1992).

Navistar has 36 air permits. Thirty-four of the permits cover volatile organic compound (VOC) discharges, mainly from the paint systems. According to OEPA, no complaints or violations for air releases have been recorded for the Navistar facility (Hull, 1991).

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the Navistar facility.

2.6.1 Climate

The climate in Clark County is characterized by warm, humid summers and cold, cloudy winters. The yearly average temperature is 53°F. The lowest average monthly temperature is 30.4°F in January, and the highest monthly average temperature is 74.6°F in July. Precipitation in west central Ohio is fairly well distributed throughout the year. The average yearly rainfall in Clark County is 38.9 inches. Rainfall peaks in May at 4.3 inches; the least monthly rainfall is 2.0 inches in October. The 1-year, 24-hour rainfall average is 2.5 inches, and the annual net precipitation is 7.0 inches. The prevailing wind is from the southwest and averages 8 miles per hour in the summer and 12 miles per hour in the winter (U.S. Department of Commerce, 1968).

2.6.2 Flood Plain and Surface Water

The surface water body nearest to the Navistar facility is Moore's Run, a small creek running parallel to the western edge of the site. Moore's Run empties into the Mad River about 3/4 miles west of Navistar. The Mad River flows south and eventually empties into the Great Miami River at Dayton. The Mad River is used for recreational fishing and boating. No municipal drinking water intakes are located on the Mad River downstream from the facility. Stormwater that does not enter drains leading to the wastewater treatment plant flows into Moore's Run.

The Navistar facility does not lie in a 100-year flood plain (National Flood Insurance Program, 1981).

2.6.3 Geology and Soils

Clark County lies on the east flank of the Cincinnati Arch, a large anticline running from Tennessee to west-central Ohio. The bedrock in the area of the facility is upper Ordovician aged shale and thinly bedded shaley limestones of Richmond, Maysville, and Eden groups. The

bedrock lies at about 90 feet below ground surface. Illinoisan and Wisconsinan glacial deposits overlie the bedrock and are composed of till, clay, silt, sand and gravel (ERM, 1989).

Glacial depositional environment are usually quite unconsolidated, and this is the case in the Navistar facility area. Sediments beneath the facility can be divided into the following four units (in descending order):

- 3-5 feet of alluvial flood plain deposits (clay, silt, fine sand and gravel)
- 40 feet of fine to coarse sand and gravel outwash
- 16-22 feet of discontinuous till (sandy gravelly silty clay)
- 11-25 feet of fine to coarse sand and gravel outwash

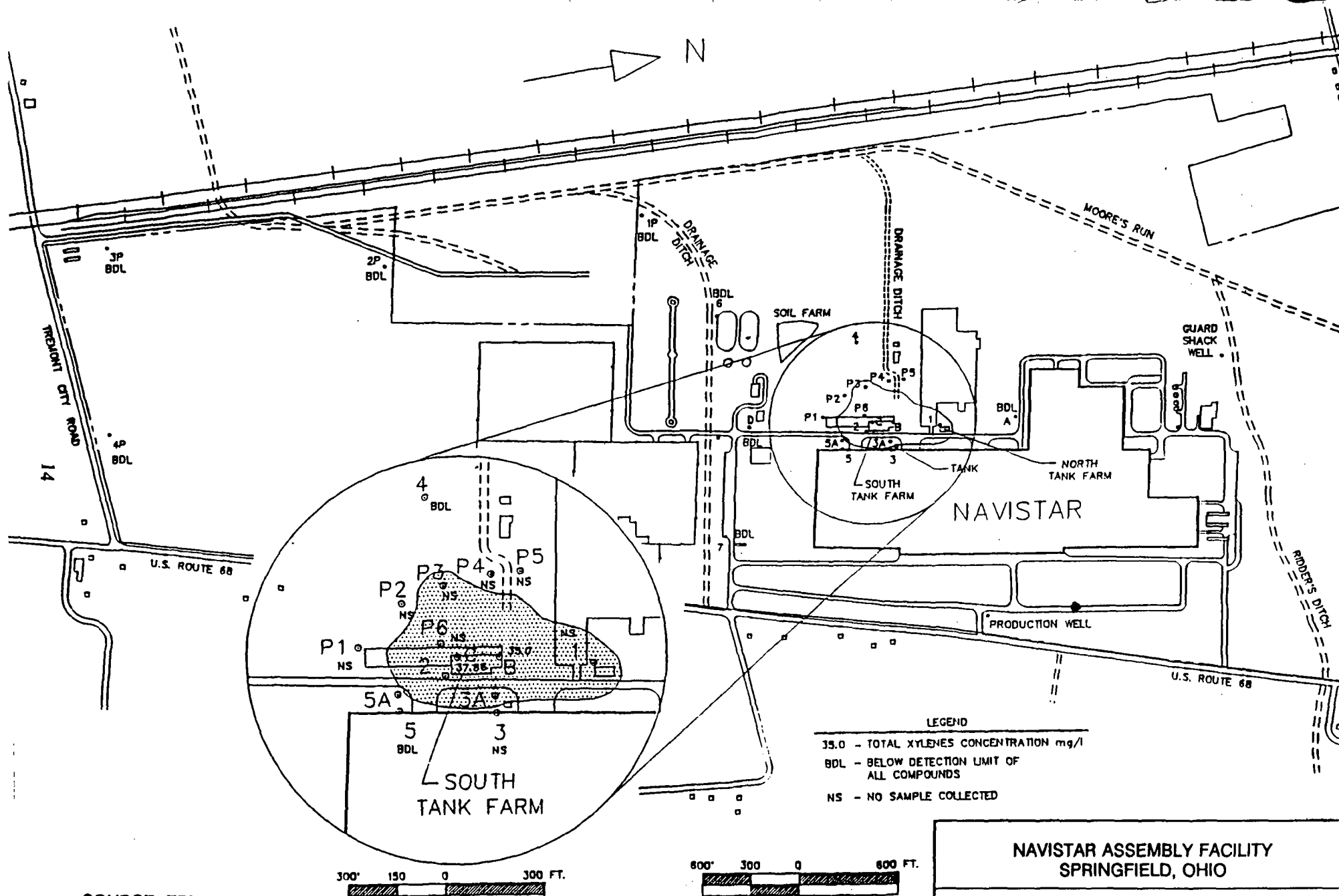
2.6.4 Ground Water

The Navistar facility lies within the Mad River Valley which contains gravel deposits capable of yielding 200 gallons per minute (Todd, 1983). In the site vicinity, the depth to ground water is about 10 feet. Ground water flows in a westerly to southwesterly direction and is recharged from ground-water movement from the northeast and from surface infiltration.

The upper sand and gravel layer acts as a primary aquifer in the site area. It is probably hydraulically connected to the lower sand and gravel unit because of the discontinuity of the till layer separating the units. Navistar receives all water from the City of Springfield. The City of Springfield draws water from a well field in the Mad River Valley located about 2.8 miles south-southwest of the site. Well logs indicate that the aquifer beneath the Navistar facility is the same aquifer used by the City of Springfield (ERM, 1988).

As mentioned in Section 2.4, OEPA discovered ground-water contamination around the South Tank Farm in 1983. Since that time, ground-water monitoring wells have been installed at various locations in the western portion of the Navistar site, mainly in the vicinity of the South and North Tank farms. Inconsistent analyses results and changes in consulting firms performing the sampling has made it difficult to determine the extent of contamination. Since 1980, four consulting firms -- Lower Brothers, Inc., Bowser Morner, Inc., OH Materials, Inc., and ERM-Midwest, Inc. -- have performed soil and ground-water investigative work at Navistar.

Figure 3 shows the extent of ground-water contamination at Navistar, as determined by the sampling in April 1989. For unknown reasons, not all wells at the site were sampled; therefore, a more conclusive identification of contaminant sources, presence, and migration patterns is not available.

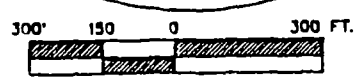


LEGEND

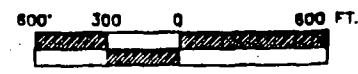
35.0 - TOTAL XYLENES CONCENTRATION mg/l

BDL - BELOW DETECTION LIMIT OF ALL COMPOUNDS

NS - NO SAMPLE COLLECTED



APPROX. SCALE:
1 IN. = 300 FT.



APPROX. SCALE: 1 IN. = 600 FT.

SOURCE: ERM, 1989

NAVISTAR ASSEMBLY FACILITY SPRINGFIELD, OHIO
FIGURE 3 EXTENT OF GROUND-WATER CONTAMINATION IN 1989
PRC ENVIRONMENTAL MANAGEMENT, INC.

As mentioned in Section 2.5, Navistar is performing an RI/FS at the site. The RI/FS should provide a much more detailed description of the extent of the contamination at Navistar. The first report was submitted to OEPA in July 1991.

2.7 RECEPTORS

The area surrounding the Navistar facility is primarily rural and composed of a number of large farms. There are about 50 people living within 1 mile of the site. The employees at Navistar are the main receptors and may be exposed to contaminants from daily operations at the site. Exposure would be mainly from inhalation of paint fumes and solvents, and from ingestion of hazardous materials from direct contact and poor personal hygiene.

The facility is surrounded by a 6-foot, steel, chain-link fence and is monitored 24 hours per day by security personnel. A number of waste satellite accumulation areas are surrounded by secondary security fences.

The aquifer system beneath Navistar is a contaminant migration pathway. As identified in Section 2.6.4, it is part of the same aquifer system used by the City of Springfield for drinking water. The City of Springfield's ground-water wells are located about 2.8 miles downgradient of Navistar. A small number of private wells are located in the vicinity of the site (all surrounding residences receive water from the City of Springfield). Ohio Department of Natural Resources (ODNR) well logs indicate that most of these wells were constructed before the introduction of city water to the area, which occurred in the mid-1960s (ERM, 1989).

Wildlife in Moore's Run and the Mad River are potential environmental receptors because Navistar's treated wastewater effluent leaves the facility via this route. Releases could affect wildlife in these surface water bodies.

There are no sensitive environments such as wetlands, parks, or critical habitats in the vicinity of the site.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the nine SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of release, and PRC observations.

SWMU 1

Hazardous Waste Storage Area

Unit Description: The Hazardous Waste Storage Area, located just west of the Navistar main building, is used for less than 90-day storage of *drummed waste. the area is concrete, uncovered, and measures about 40 feet by 100 feet.* The area is surrounded by a concrete berm and a 6-foot, steel, chain-link fence that is kept locked except during waste transfers (see Photograph Nos. 1 and 2).

Date of Startup: The unit was constructed in 1986.

Date of Closure: The unit currently operational.

Wastes Managed: The unit manages waste paints, solvents, oils, and antifreeze.

Release Controls: The unit is constructed of concrete surrounded by a 5-inch by 5-inch berm. The area has a series of drains for accumulation of spills or rainwater. The drains feed directly to Navistar's wastewater treatment facility.

History of Release: No releases from this unit have been documented.

Observations: The hazardous waste container storage unit appeared to be in sound condition during the VSI. PRC observed no evidence of release.

SWMU 2

South Tank Farm

Unit Description: The South Tank Farm is located just west of the Navistar main building and is composed of 10 underground, steel tanks ranging in size from 3,000 to 10,000 gallons. The tank farm covers an area of

about 100 feet by 30 feet and is surrounded by a 6-foot high, steel, chain-link fence.

Included in the studies of the South Tank Farm is a separate 10,000-gallon, underground, steel tank used for accumulation of waste paint and solvents for less than 90 days. It is located about 30 feet east of the South Tank Farm and borders the main Navistar building (see Photograph No. 3). The tank is no longer active.

Date of Startup:	The South Tank Farm was constructed in 1966. The tank east of the South Tank Farm was installed in 1985.
Date of Closure:	Navistar plans to close the South Tank Farm by late 1992. The tank east of the South Tank Farm has been taken out of service and is awaiting closure.
Wastes Managed:	Three of the tanks of the South Tank Farm have been used for storage of waste oils, solvents, antifreeze, and paints. The other tanks have been used for virgin material storage. The tank east of the South Tank Farm was used for waste paint and solvents.
Release Controls:	Until 1986, the area had no release controls. At that time, soil in the South Tank Farm area was excavated, and a bermed, concrete transfer area was installed to prevent spills in the area while the tanks were filled.
History of Documented Releases:	Ground-water sampling performed in the area of the South Tank Farm in 1983 revealed the presence of hydrocarbon-based organic contaminants. An investigation of the area by BMI in 1985 attributed the contamination to surface spillage and indicated that the contaminants were mainly confined to the soil surrounding the tank farm. An undetermined amount of contaminated soil was removed and placed in the waste pile area. Navistar is currently performing an RI/FS at the facility to further determine contaminant presence and migration.

Observations: Observable features at the South Tank Farm appeared to be sound during the VSI. No surface spills locations could be identified.

SWMU 3

Sludge Rolloff

Unit Description: The Sludge Rolloff is located towards the center of the site, just north of the paint sludge building. The unit is used for the accumulation of sludge from detakifying operations. The rolloff is constructed of steel and has a capacity of 20-cubic yards. The rolloff is based on solid concrete (see Photograph No. 4).

Date of Startup: The rolloff has been used since 1987.

Date of Closure: The unit is active.

Wastes Managed: The unit is used for the accumulation of sludge from detakifying operations.

Release Controls: The unit is kept on concrete and is covered.

History of Documented Releases: No releases from the unit has been documented.

Observations: During the VSI, the rolloff was in sound condition and no spilled material was noted.

SWMU 4

Satellite Accumulation Areas

Unit Description: Navistar uses 300-gallon, stainless steel totes and 55-gallon drums for satellite accumulation of waste material. The totes are used in the finishing building for collection of wastes resulting from cleaning procedures. Until late 1991, totes were taken to the South Tank Farm (SWMU 2) and emptied. Totes are currently taken to the Bulk Tank Farm (SWMU 7). Full 55-gallon drums are taken to the Hazardous Waste Storage Area (SWMU 1) for 90-day accumulation (see Photograph No. 5).

Date of Startup: The units have been used since the early 1980s.

Date of Closure:	The units are currently operating.
Wastes Managed:	Totes and 55-gallon drums are used for the temporary accumulation of waste paint and solvents.
Release Controls:	The units are kept indoors on a concrete floor.
History of Documented Releases:	No releases from the totes have been documented.
Observations:	The totes appeared to be in sound condition during the VSI.
SWMU 5	Incinerator
Unit Description:	Navistar uses the Incinerator to destroy VOCs from the paint building. The Incinerator is located about 500 feet from the main Navistar building and just south of the paint building. The unit has a capacity of 40,000 cubic feet per minute. It is uncovered, rests on a concrete base, and is surrounded by a 6-foot, steel, chain-link fence (see Photograph No. 6).
Date of Startup:	The unit was constructed in 1987.
Date of Closure:	The unit is currently operating.
Wastes Managed:	The unit incinerates VOCs from Navistar's paint system.
Release Controls:	The incinerator is a modern unit and is monitored continually for destruction of VOCs.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The incinerator appeared to be in sound condition during the VSI.

SWMU 6

Old Drum Storage Areas

Unit Description:

Two areas at the Navistar site were used for storage of drummed hazardous waste until 1986. The present Hazardous Waste Storage Area went into operation at that time.

The older of the two drum storage areas was located in the area that is now the paint building (see Figure 4). The area was an uncovered gravel pad with no containment mechanisms.

The second of the Old Drum Storage Areas was located just north of the South Tank Farm. The area was uncovered, undiked, and constructed of asphalt.

Date of Startup:

The older of the two areas was used from 1966 to 1980. The second of the older areas was used from 1980 to 1986.

Date of Closure:

According to available documentation, neither area went through formal closure.

Wastes Managed:

Because processes at the Navistar site have remained basically the same since operations started in 1966, the wastes stored in the older drum storage areas were probably comparable to wastes stored in the present hazardous waste storage area. These include waste paints, waste solvents, waste oils, and waste antifreeze.

Release Controls:

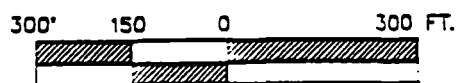
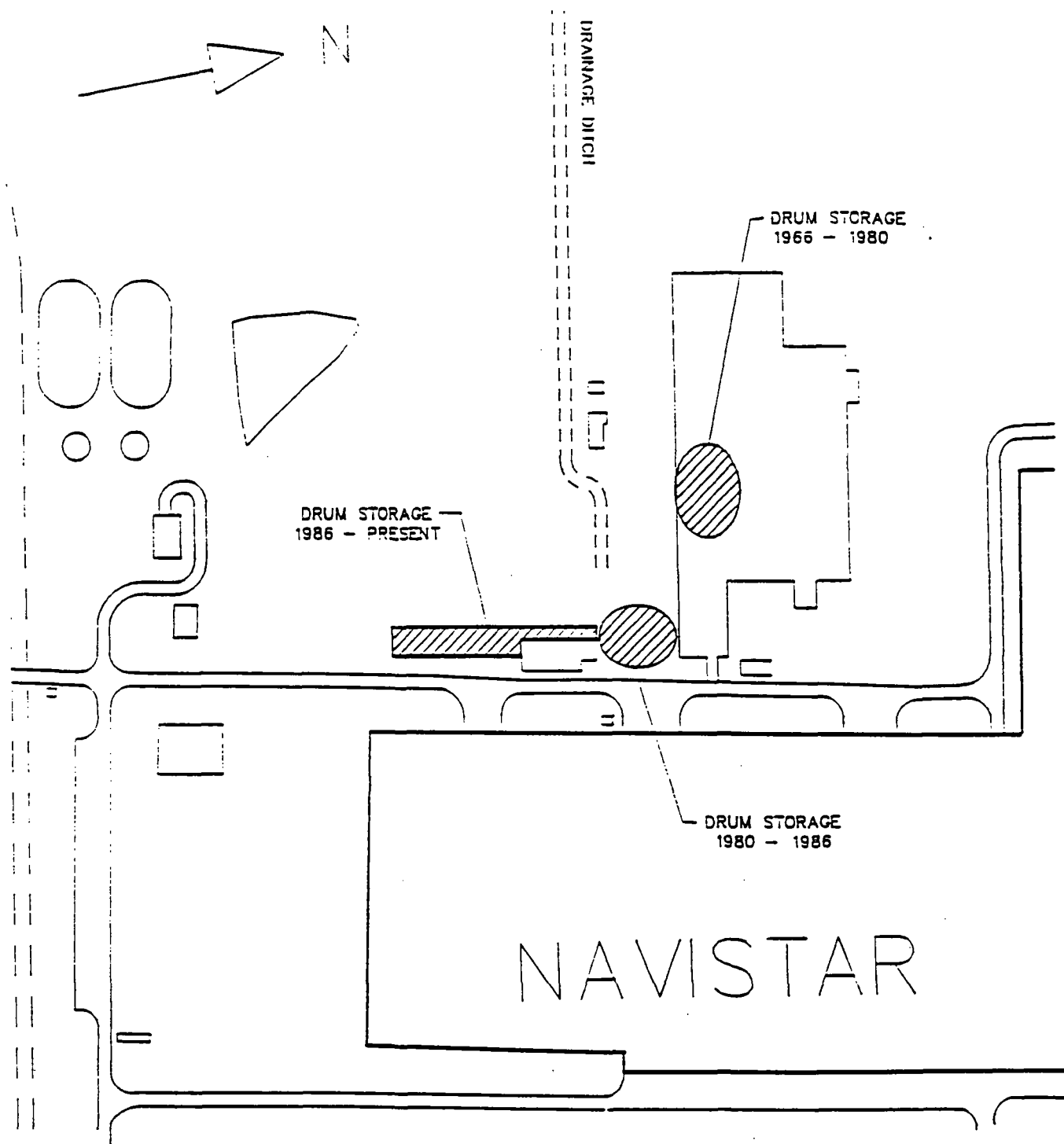
The drum storage area used from 1966 to 1980 was an uncovered gravel pad. The drum storage area used from 1980 to 1986 was an uncovered asphalt pad. Neither area was bermed or possessed containment sumps.

History of Documented Releases:

No releases from these units have been documented.

Observations:

Because of construction at the site, neither area still exists.



APPROX. SCALE: 1 IN. = 300 FT.

SOURCE: ERM, 1989

NAVISTAR ASSEMBLY FACILITY
SPRINGFIELD, OHIO

FIGURE 4
OLD DRUM STORAGE AREAS

PRC ENVIRONMENTAL MANAGEMENT, INC.

SWMU 7**Bulk Tank Farm**

Unit Description: The Bulk Tank Farm is a newly constructed, aboveground storage tank (AST) area located west of the main Navistar building. It went on-line in late-1991. The area is uncovered and consists of 17 tanks ranging from 8,000 gallons to 12,000 gallons. The tank farm is used for waste storage as well as virgin product storage. The pumping terminal is equipped with a computerized pumping system and an extraction system for removing contents from drums (see Photograph No. 7).

Date of Startup: The unit went on-line in late 1991.

Date of Closure: The unit is active.

Wastes Managed: The Bulk Tank Farm will manages waste paint, waste solvents, waste mineral spirits, and waste oil.

Release Controls: The area is built on microsilicate-sealed concrete and is surrounded by a 18-inch to 24-inch containment dike. Total containment capacity exceeds that of the tanks by 20 percent. The pumping terminal and AST area are equipped with drains the allow spills and rainwater to be directed to the wastewater treatment facility.

History of Documented Releases: No releases form this unit have been documented.

Observations: During the VSI, the unit was still under construction.

SWMU 8**Waste Pile Area**

Unit Description: The Waste Pile Area is located about 250 feet west of the south end of the main Navistar building. The waste pile contains soil removed from the vicinity of the South tank Farm (SWMU 2) contaminated with VOCs. The waste pile covers about 10,000 square feet and rises in the center about 10 feet. The area is overgrown with foliage and kept cut during the summer months (see Photograph No. 8).

Date of Startup:	The unit was constructed in 1985.
Date of Closure:	The unit has never been formally closed, although OEPA is satisfied with the structure (Hull, 1991).
Wastes Managed:	The unit contains organic-contaminated soil.
Release Controls:	When building the waste pile containment unit, the area was excavated and the earthen berms were constructed surrounding the area. The unit was then lined with two layers of Visqueen separated by a thin soil layer and the contaminated soil was placed in the area. Leachate and stormwater from the waste pile drains to a concrete sump which directs the water to the wastewater treatment facility.
History of Documented Releases:	No releases from the unit have been documented.
Observations:	The Waste Pile Area appeared to be in sound condition during the VSI.
SWMU 9	Wastewater Treatment Plant
Unit Description:	The Wastewater Treatment Plant is located about 1,000 feet southwest of the main Navistar building and covers an area of about 40,000 square feet. The unit has operated since the plant opened in 1966 and has been continually upgraded over the years. Aeration units used at the plant doubled from two to four in the late 1960s. When the paint building was constructed in 1986, additions to SWMU 9 included an additional holding tank, and oil/water separator, mixed reaction tanks, E-coat batch tanks, multimedia filters, pH adjustment tanks, bar screens, and sludge presses (see Photograph Nos. 9, 10, and 11). Two extended aeration units were also added. All wastewater from the Navistar plant flows to the treatment building, which uses three different treatment processes.

Sanitary waste is aerated in the open-top aeration tanks, clarified, and disinfected. Industrial wastewater is treated by settling out solid materials. E-coat is treated in a precipitation batch system to remove solids. The sludge from both the industrial treatment system and the E-coat system are combined and dewatered in a filter press to about 25 percent solids. Sanitary waste sludge is disposed at a seed farm. The E-coat and industrial sludge is sent as nonhazardous waste to a landfill.

Date of Startup:	The unit was constructed in 1966.
Date of Closure:	The unit is currently operating.
Wastes Managed:	The unit processes sanitary wastewater, industrial wastewater, and E-coat wastewater.
Release Controls:	The holding tanks at the facility are inspected regularly by Navistar. Holding capacities provide adequate retention during treatment system interruptions.
History of Documented Releases:	Navistar has violated its NPDES permit limitations numerous times over the years.
Observations:	The unit appeared to be in sound condition during the VSI.

4.0 AREAS OF CONCERN

PRC identified two AOCs during the PA/VSI. These are discussed below.

AOC 1 North Tank Farm

The North Tank Farm is located just west of the center of the main Navistar building and was constructed in 1966. It is composed of five 8,000-gallon, underground, steel tanks that area used for storage of virgin oils, mineral oils, gear lube oil, and other fluids used in transmission and brake systems.

BMI detected organic soil contamination in this area in 1984, although later studies have not confirmed contaminant presence. The North Tank Farm is one of the primary units being studied in the RI/FS.

AOC 2 Old North Tank Farm

The Old North Tank Farm was located west of the north end of the main Navistar building. The tank farm consisted of five 8,00-gallon steel tanks. The tanks were used for storing unused oils, transmission fluid, and other engine product materials. Because of the building renovations, all of the tanks were removed from the area in the early 1970s.

This area in included in the RI/FS because of unconfirmed reports of hydrocarbon contamination in the surrounding soils when the tanks were removed (McDaniel, 1991b).

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified nine SWMUs and two AOCs at the Navistar facility. Background information on the facility's location, operations, waste generating processes, release history, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, release history, and observed condition, is discussed in Section 3.0. AOCs are discussed in Section 4.0. Following are PRC's conclusions and recommendations for each SWMU and AOC. Table 3 identifies the SWMUs and AOCs at the Navistar facility and suggested further actions.

SWMU 1

Hazardous Waste Storage Area

Conclusions:

The Hazardous Waste Storage Area is constructed of sealed concrete and is bermed. The area is surrounded by a 6-foot high, steel, chain-link fence and is monitored regularly. Spills or rainwater accumulation flow to drains connected to the Wastewater Treatment Plant (SWMU 9). The probability of a release via environmental media is summarized below.

Ground Water: Low. Because of the design of the unit, stormwater and spills will flow to drains.

Surface Water: Low. No surface water is present in the vicinity of the storage area.

Air: Low. A contaminant release to air is possible if the integrity of the stored drums is breached. Because waste is stored in drums, the potential for release is minimal.

On-Site Soils: Low. No ground surface is exposed in the vicinity of the storage unit. Spilled waste and stormwater are contained.

Recommendations: No further action is recommended at this time.

SWMU 2

South Tank Farm

Conclusions:

The South Tank Farm is composed of 10 underground, steel tanks ranging in size from 3,000 gallons to 10,000 gallons. The tank farm covers an area of about 30,000 square feet and is surrounded by a 6-foot high, steel,

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chain-link fence. Releases to ground water and on-site soils have been documented at the South Tank Farm and the area is currently the main focus of the RI/FS conducted at Navistar.

Recommendations: PRC recommends a review of the results of the RI/FS being performed at the site. Once a review is complete, further action may be required.

SWMU 3 Sludge Rolloff

Conclusions: The Sludge Rolloff is made of steel, kept covered and staged on concrete. *During the VSI, no spilled material or stains were noted near the unit. The potential for release via environmental media is summarized below.*

Ground Water: Low. The unit was in sound condition during the VSI.

Surface Water: Low. No surface water is present in the vicinity of the unit.

Air: Low. Sludge stored in the unit has low volatility.

On-Site Soils: Low. No ground surface is exposed in the vicinity of the unit.

Recommendations: No further action is recommended at this time.

SWMU 4 Satellite Accumulation Areas

Conclusions: The totes and drums used for satellite accumulation are constructed of steel and are monitored regularly. All are kept indoors on concrete. The probability of a release to environmental media is low. The potential for release via environmental media is summarized below.

Ground Water: Low. The units are kept indoors on solid concrete.

Surface Water: Low. No surface water is present in the vicinity of the units.

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Air: Low. The units are open only when transfers are made, thus allowing loss of paint fumes.

On-Site Soils: Low. No ground surface is exposed in the vicinity of the accumulation units.

Recommendations: No further action is recommended at this time.

SWMU 5

Incinerator

Conclusions: The Incinerator was installed in 1987. It is a modern unit and is monitored regularly. The potential for release via environmental media is summarized below.

Ground Water: Low. The Incinerator manages paint vapor only.

Surface Water: Low. The Incinerator manages paint vapors only.

Air: Low. The Incinerator is a modern, efficient unit. It is monitored continually for proper volatile destruction.

On-Site Soils: Low. The Incinerator manages paint vapors only.

Recommendations: No further action is recommended at this time.

SWMU 6

Old Drum Storage Areas

Conclusions: Neither of the Old Drum Storage Areas had sufficient containment devices. Spills or stormwater in the areas could have easily passed to the surrounding soils. Accidents during waste transfer and handling such as a fork-lift blade puncturing the side of a waste solvent drum, would have released contamination directly to on-site soils. The potential for a release via environmental media is summarized below.

Ground Water: Moderate. Because neither area possessed sound containment devices, and because of the shallow water table at the site, contamination may have migrated from on-site soils to the ground water.

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Surface Water: Low. No surface water is present in the vicinity of the Old Drum Storage Areas.

Air: Low. Because of the low amount of contamination to be at these areas, releases to air will be minimal.

On-Site Soils: Moderate. Possible releases to on-site soils from the drum storage area used from 1966 to 1980 were probably dispersed during construction of a paint building. Neither area possessed sound containment devices; thus making it moderately probable that releases to on-site soils have occurred.

Recommendations: PRC recommends a review of the RI/FS being conducted at Navistar. Much of the investigation is focusing on the South Tank Farm area, and will probably identified contamination from the Old Drum Storage Areas. Whether identified contamination can be traced to the storage areas is unknown.

SWMU 7

Bulk Tank Farm

Conclusions: The Bulk Tank Farm went on-line in late 1991. All of the equipment is new and the area is surrounded by a sealed concrete containment area with drains leading to the Wastewater Treatment Plant (SWMU 9). The potential for release via environmental media is summarized below.

Ground Water: Low. The Bulk Tank Farm is a modern facility and is protected by a secure containment area.

Surface Water: Low. No surface water is present in the vicinity of the Bulk Tank Farm.

Air: Low. No volatile contaminants will be exposed to the atmosphere.

On-Site Soils: Low. The Bulk Tank Farm is surrounded by a concrete containment area with drains leading to the Wastewater Treatment Plant (SWMU 9). Spills and rainwater will be contained.

Recommendations: No further action is recommended at this time.

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SWMU 8

Waste Pile Area

Conclusions:

The Waste Pile Area is lined with visqueen and has a leachate collection system that flows to the wastewater treatment system. The area is being studied in the RI/FS. The potential for release via environmental media is summarized below.

Ground Water: Low. Leachate is contained and sent to the Wastewater Treatment Plant (SWMU 9).

Surface Water: Low. No surface water is present in the vicinity of the Waste Pile.

Air: Low. Because the contaminant levels in the soils are low, releases to the air will be minimal.

On-Site Soils: Low. The area is bermed, overgrown with grass, and has a leachate system. All stormwater run-off and leachate is directed to the Wastewater Treatment Plant (SWMU 9).

Recommendations:

No further action is recommended at this time.

SWMU 9

Wastewater Treatment Plant

Conclusions:

The Wastewater Treatment Plant is monitored continuously and has sufficient containment systems. NPDES violations have occurred in the past because of insufficient treatment of wastewater. The potential for release via environmental media is summarized below.

Ground Water: Low. During the VSI, the Wastewater Treatment Plant tanks appeared to be in sound condition.

Surface Water: Moderate. Numerous NPDES violations, mainly involving suspended solids and BOD, have occurred in the past.

Air: Low. There are very low levels of volatile organics in the wastewater.

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On-Site Soils: Low. The Wastewater Treatment Plant contains a number of backup tanks in case of a shutdown. Excess wastewater will be contained.

Recommendations: PRC recommends that Navistar's wastewater plant effluent discharge be periodically sampled on an unannounced basis.

AOC 1 North Tank Farm

Conclusions: The North Tank Farm was constructed in the early 1970s and operated until late 1991. Contamination was found in a 1984 study of the area; later studies have not been able to confirm this contamination. If contamination exists, it should be identified during the RI/FS. The potential for release to environmental is summarized below.

Ground Water: Moderate. As mentioned above, ground-water contamination was detected in the area in a 1984 study, although this has not been confirmed in later studies.

Surface Water: Low. Contamination in the North Tank Farm area would only involve soil or ground water.

Air: Low. Contamination in the North Tank Farm area would only involve soil or ground water.

On-Site Soils: Moderate. If ground-water contamination is present, soil contamination is probable.

Recommendations: PRC recommends a review of the results of the RI/FS being performed at the Navistar site. The results should reveal whether there is contamination in the vicinity of the North Tank Farm.

AOC 2 Old North Tank Farm

Conclusions: The Old North Tank Farm was removed in the early 1970s. Little information could be located concerning the removal, although unconfirmed reports indicate that soil contamination was observed during

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the removal. The Old North Tank Farm is one of the primary units being studied under the RI/FS. The potential for release to environmental media is summarized below.

Ground Water: Moderate. If the underground tanks leaked to surrounding soils or if spills occurred during tank filling, contaminants may have migrated to ground water.

Surface Water: Low. Contamination in the Old North Tank Farm area would only involve soil or ground water.

Air: Low. Contamination in the Old North Tank Farm area is believed to be low, therefore releases to air should be minimal.

On-Site Soils: Moderate. When the Old North Tank Farm was removed, unconfirmed reports indicated that contamination was present in the surrounding soils. Because much of the soil in the area of the Old North Tank Farm has been reworked during later construction activities, possible contamination in soils may have been dispersed.

Recommendations: PRC recommends a review of the results of the RI/FS being performed at Navistar. The existence of contamination in the vicinity of the Old North Tank Farm should be verified by this study.

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TABLE 3
 SWMU AND AOC SUMMARY

<u>SWMU</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. Hazardous Waste Storage Area	1986 to present	None	No further action
2. South Tank Farm	1966 to present	VOC contamination of soils and ground water in the area has been confirmed.	Review results of RI/FS being performed at the site.
3. Sludge Rolloff	1987 to present	None	No further action
4. Satellite Accumulation Areas	Early 1980s to present	None	No further action
5. Incinerator	1987 to present	None	No further action
6. Old Drum Storage Areas	1966 to 1986	None	Review results of the RI/FS being conducted at the site for possible contamination in these two areas
7. Bulk Tank Farm	The unit will go on-line during mid- to late-1991	None	No further action
8. Waste Pile Area	1985 to present	None	No further action
9. Wastewater Treatment Plant	1966 to present	Navistar has violated its NPDES limitations numerous times.	Navistar's effluent should be periodically sampled on an unannounced basis.
<u>AOC</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. North Tank Farm	1966 to present	Ground-water contamination was detected in this area in 1985. Contamination has not been confirmed in later studies.	Review the results of the RI/FS being conducted at the site for contamination in this area.

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TABLE 3 (continued)
SWMU AND AOC SUMMARY

<u>AOC</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
2. Old North Tank Farm	1966 to early 1970s	During removal of the tanks, soil in the vicinity was reported to be visibly contaminated with hydrocarbons. Hydrocarbon contamination has not been confirmed by sampling and analyzing soil samples in this area.	Review the results of the RI/FS being conducted at the site for possible contamination in this area.

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ATTACHMENT A
EPA PRELIMINARY ASSESSMENT FORM 2070-12

**EPA**

**POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT**

I. IDENTIFICATION

01 STATE OH	02 SITE NUMBER D049654120
----------------	------------------------------

II. SITE NAME AND LOCATION01 SITE NAME (Legal, common, or descriptive name of site)
Navistar International Transportation Corporation02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
6125 Urbana Road (U.S. 68)03 CITY
Springfield

04 STATE OH	05 ZIP CODE 45501	06 COUNTY Clark	07 COUNTY CODE	08 CONG DIST
----------------	----------------------	--------------------	----------------	--------------

09 COORDINATES: LATITUDE LONGITUDE
40 01 30 . N 83 47 30 . W

10 DIRECTIONS TO SITE (Starting from nearest public road)

Take U.S. Route 68 north from Springfield, Ohio. Travel about 5 miles. Site will be on the left.

III. RESPONSIBLE PARTIES01 OWNER (If known)
Navistar International Transportation Corp.02 STREET (Business, mailing residential)
401 N. Michigan Ave.03 CITY
Chicago

04 STATE IL	05 ZIP CODE 60611	06 TELEPHONE NUMBER (312)836-3051
----------------	----------------------	--------------------------------------

07 OPERATOR (If known and different from owner)

08 STREET (Business, mailing, residential)

09 CITY

10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ()
----------	-------------	----------------------------

13 TYPE OF OWNERSHIP (Check one)

- ☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
- ☐ F. OTHER _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

- ☐ A. RCRA 3010 DATE RECEIVED: ____/____/____ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ____/____/____ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

BY (Check all that apply)

- ☒ YES DATE 06 / 13 / 91 ☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
- ☐ NO ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): PRC Environmental Management, Inc.

02 SITE STATUS (Check one)

- ☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1986 | NA:Active ☐ UNKNOWN

BEGINNING YEAR ENDING YEAR

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Waste solvents, waste paint material.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Confirmed soil and ground-water contamination.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)

- ☒ A. HIGH ☐ B. MEDIUM ☐ C. LOW ☐ D. NONE
- (Inspection required promptly) (Inspection required) (Inspect on time-available basis) (No further action needed; complete current disposition form)

VI. INFORMATION AVAILABLE FROM01 CONTACT
Kevin Pierard02 OF (Agency/Organization)
EPA Region 503 TELEPHONE NUMBER
(312) 886-444804 PERSON RESPONSIBLE FOR ASSESSMENT
Peter R. Zelinskas

05 AGENCY

06 ORGANIZATION
PRC07 TELEPHONE NUMBER
(513)241-014908 DATE
08 / 02 / 91
MONTH DAY YEAR

EPA FORM 2070-12(7-81)



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE
OH

02 SITE NUMBER
D049654120

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 50,000

04 NARRATIVE DESCRIPTION

Ground-water contamination has been confirmed at the site.

01 ☒ B. SURFACE WATER CONTAMINATION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: unknown

04 NARRATIVE DESCRIPTION

Navistar has exceeded its NPDES permit limitations numerous times.

01 ☐ C. CONTAMINATION OF AIR

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 4,400

04 NARRATIVE DESCRIPTION

Flammable solvents are used, posing a fire risk.

01 ☐ E. DIRECT CONTACT

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 500

04 NARRATIVE DESCRIPTION

Employees working with hazardous materials are likely to come in contact with the materials.

01 ☐ F. CONTAMINATION OF SOIL

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 AREA POTENTIALLY AFFECTED: unknown
(Acres).

04 NARRATIVE DESCRIPTION

Soil contamination has been confirmed at the site.

01 ☐ G. DRINKING WATER CONTAMINATION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: unknown

04 NARRATIVE DESCRIPTION

Area residents receive water from the City of Springfield. It is unknown if any wells in the site vicinity are used for drinking water.

01 ☐ H. WORKER EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: 500

04 NARRATIVE DESCRIPTION

From hazardous materials.

01 ☐ I. POPULATION EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: unknown

04 NARRATIVE DESCRIPTION

Any possible exposure from site hazards is minimal.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE OH 02 SITE NUMBER D049654120

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None reported. None noted during the VSI.

01 ☐ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

None noted although most native species have been eliminated.

01 ☐ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Unknown, although it is possible food chain has been disturbed.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

None to report.

01 ☐ N. DAMAGE TO OFF-SITE PROPERTY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None reported. None noted during the VSI.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPS ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None to report. None noted during the VSI.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None to report.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None to report.

III. TOTAL POPULATION POTENTIALLY AFFECTED: unknown

IV. COMMENTS

Navistar is conducting an RI/FS at the site. Reports are due to OEPA by mid to late 1991.

V. SOURCES OF INFORMATION (Cite specific references; e.g., state files, sample analysis, reports)

Navistar

ATTACHMENT B

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Navistar Facility
Springfield, Ohio
OHD 049 654 120

Date: June 13, 1991

Facility Representatives: Tim McDaniel, Navistar Engineer
Lisa Pickens, Navistar Scientist

Inspection Team: Peter Zelinskas, PRC Geologist
Mike Hyrenciew, PRC Technical Assistant

Photographer: Mike Hyrenciew, PRC

Weather Conditions: Hot, Sunny 85°F

Summary of Activities: PRC met with Navistar and OEPA personnel at 9:00 am. A short introductory meeting was held and PRC explained the purpose of the PA/VSI. Navistar supplied information concerning site activity previously requested by PRC.

A tour of the facility began at 9:30 am. Tim McDaniel explained waste generation processes and the stages of the assembly line.

The tour then proceeded to the paint building, and PRC was shown waste generation points and the paint system components. Flash photographs were not permitted in this area because of possible ignition of flammable vapors.

PRC then inspected the outside areas and the western portion of the site. This area included most of the SWMUs and monitoring well clusters.

The tour then returned to the main office, and Navistar supplied information that had been requested by PRC during the tour. PRC left the facility at about 1:00 pm.



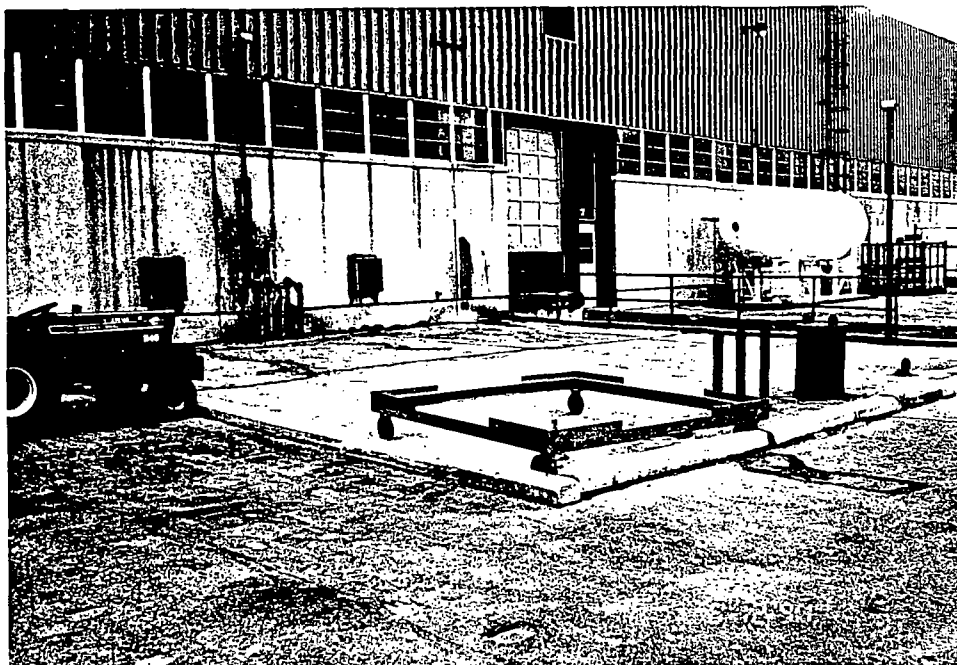
Photograph No. 1
 Orientation: North
 Description: The Hazardous Waste Storage Area

Location: SWMU 1
 Date: 6/13/91



Photograph No. 2
 Orientation: West
 Description: The drop zone for the Hazardous Waste Storage Area

Location: SWMU 1
 Date: 6/13/91



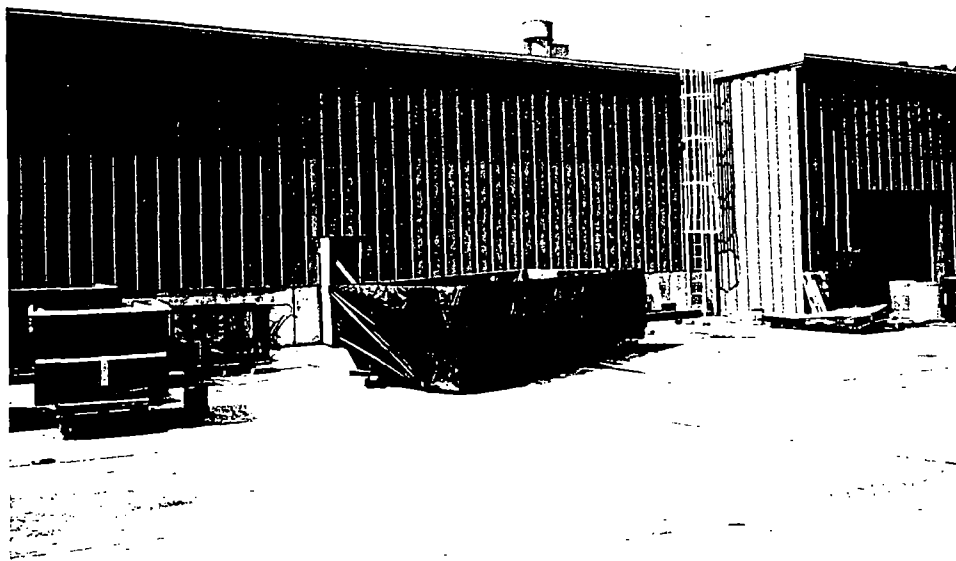
Photograph No. 3

Orientation: Southeast

Description: The surface of the 10,000 gallon, underground storage tank just east of the South Tank Farm

Location: SWMU 2

Date: 6/13/91



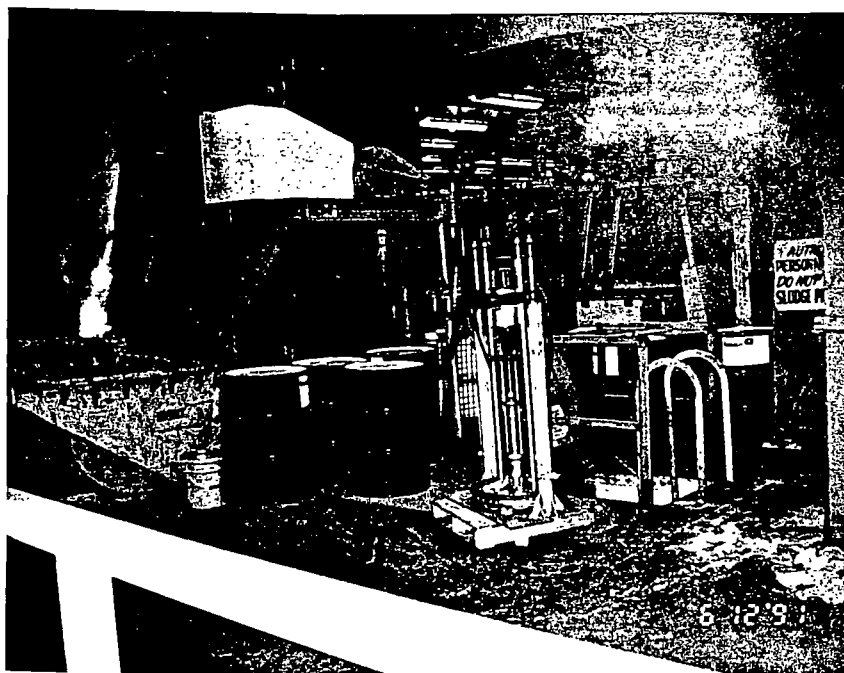
Photograph No. 4

Orientation: Southwest

Description: The Sludge Rolloff.

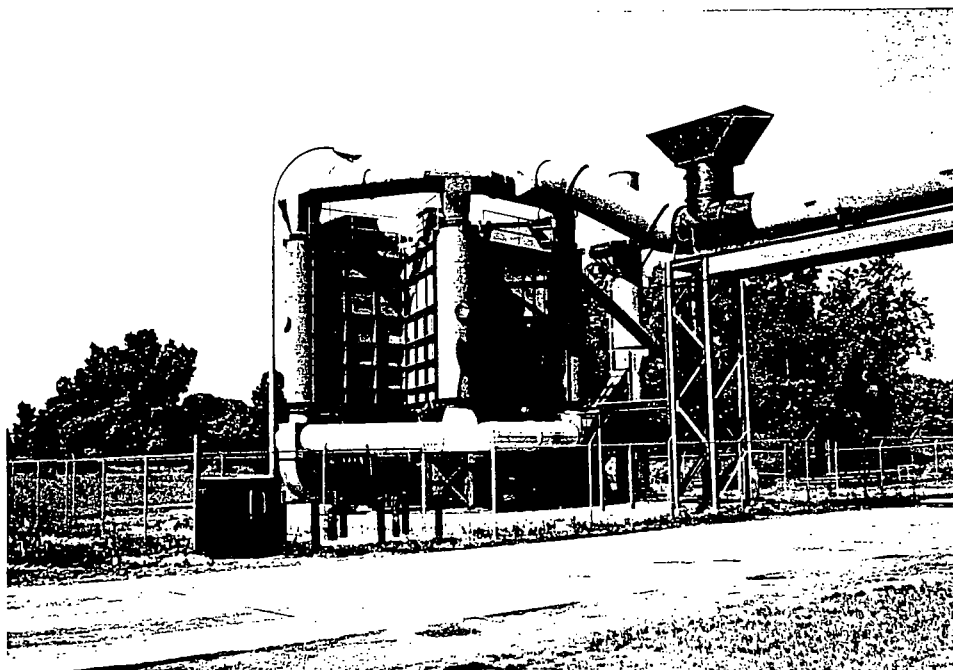
Location: SWMU 3

Date: 6/13/91



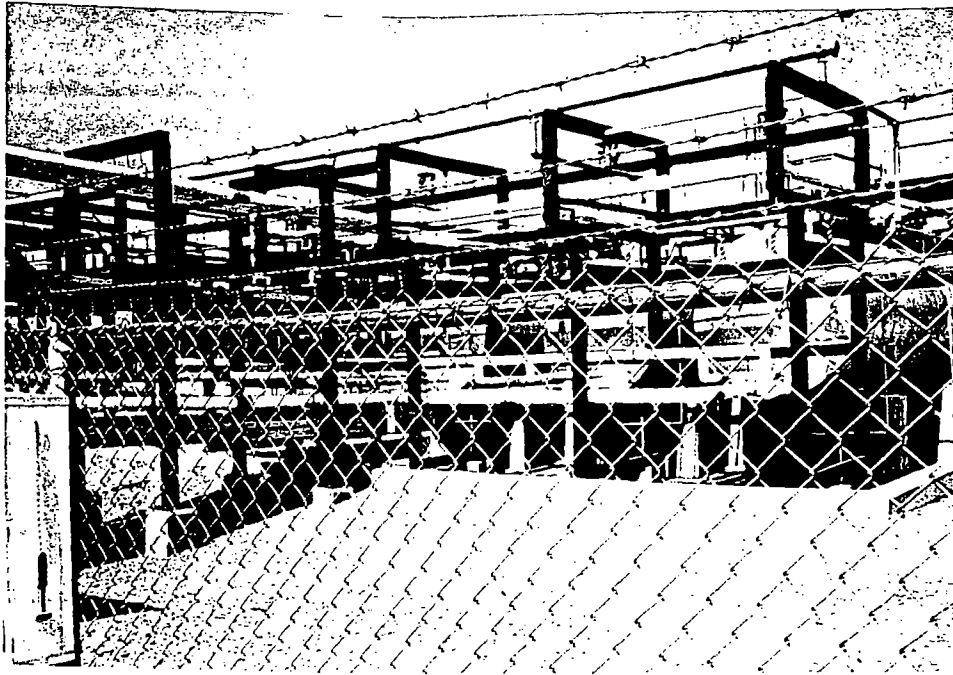
Photograph No. 5
 Orientation: Southwest
 Description: Shown at the left is a tote used for sludge accumulation.

Location: SWMU 4
 Date: 6/13/91



Photograph No. 6
 Orientation: Southwest
 Description: The Navistar VOC incinerator.

Location: SWMU 5
 Date: 6/13/91



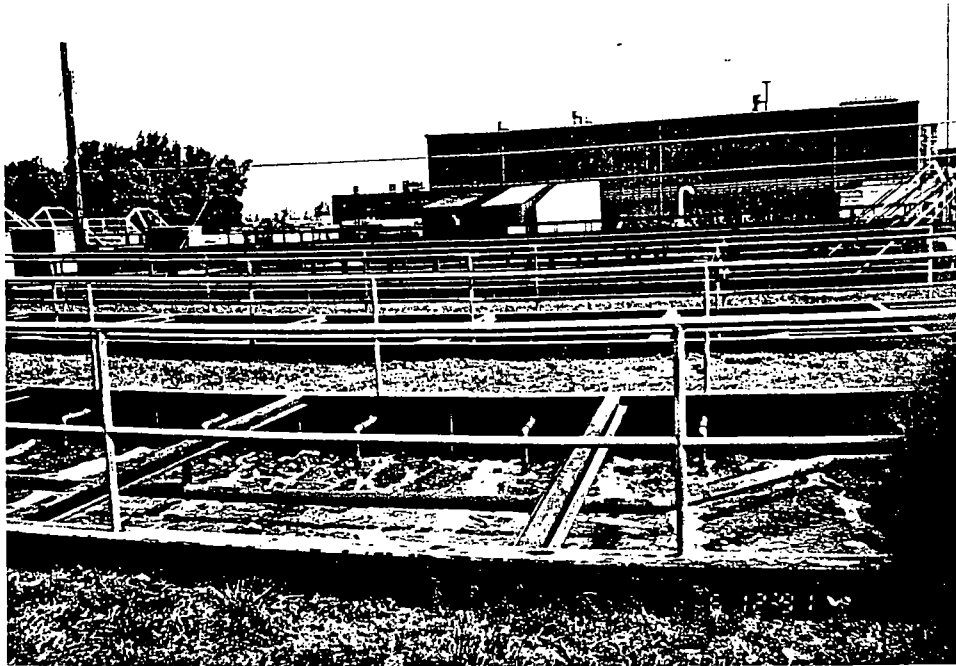
Photograph No. 7
 Orientation: West
 Description: The Bulk Tank Farm; note the containment system.

Location: SWMU 7
 Date: 6/13/91



Photograph No. 8
 Orientation: West
 Description: The Waste Pile Area is in the background. Two sets of monitoring well clusters can be seen.

Location: SWMU 8
 Date: 6/13/91



Photograph No. 9

Orientation: North

Description: Aeration tanks at the Wastewater Treatment Plant for sanitary waste are shown in the foreground.

Location: SWMU 9

Date: 6/13/91



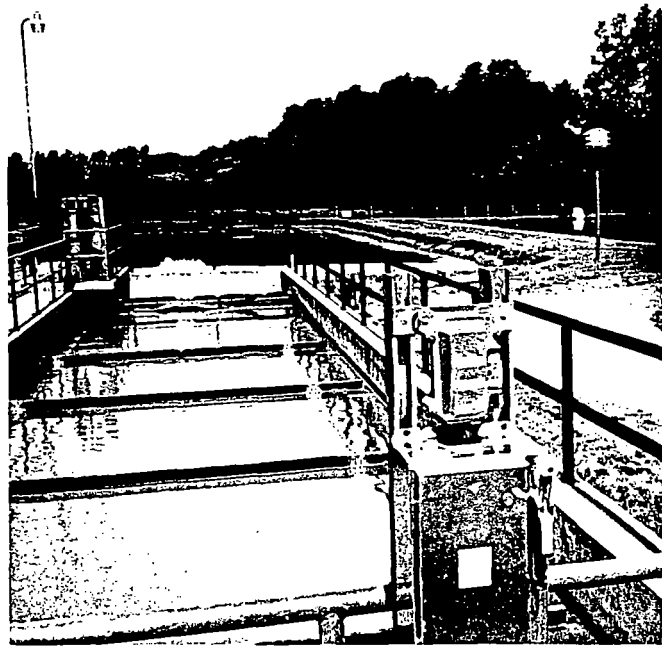
Photograph No. 10

Orientation: North

Description: A temporary holding tank at the Wastewater Treatment Plant is shown in the background.

Location: SWMU 9

Date: 6/13/91



Photograph No. 11

Orientation: West

Description: A solids settling tank is shown in the foreground; one of the two final settling lagoons is shown in the background.

Location: SWMU 9

Date: 6/13/91

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

2. ~~in summer of 1988~~
~~the water was~~

9000 gal

250 tank chert

Need to know how
early tank will
be removed.

Water tank 250
removed and tank
to be water tank.
Not sure how much
will be removed.
Probably 250.

27 tanks total

60-5-5000
5. North

Navistar 6-13-91 Sunny
Site Contact - Tim McDaniel
Status changed after 84 to
generator with < 90 days.

* Photo #1 Paint spray area
Cross's booth (line)
Cotton system, Sludge around
6 weeks, decontaminated

Two jobs - work
3rd - North.

Mid-80's remedial work
Everything thrown out.
Removed Cont. Soil.

RI/FS ~ 1988

* Detached paint sludge
Removed at the top
North Sludge pit.
Sent to Pinnick Rd.
1405-66
Concrete - clear?
Photos 2, 3

John Zilinski 6-13-91

4

Chemicals are added
to dead paint taking
away the tackiness.
Two Booths 57, 26

→ Chavis system has its
own booths.

Series of cab painting.
Follows a pretreatment
system to a down line.
Spray rinses after this.
P80, 87

Janitorial - } Both surrounded
E-coat - } by 8' x 8"
Industrial - }
bom. Pumped from
Jumps after dilution
to WWD-Jump
Photo 4

Filters - 300. accum -

1,1,1 - trichlor
collected in tanks
in this area (wipes)

Deto R. Zulueta 6-13-91

5

Large solvent and paint
for color changes = 300 gallons
Removed by Ashland for recycling.

* Enclosures for paint lines
40,000 CFM
on concrete base fenced

* Paint Storage Oil
The type of paint used in
the plant is not flammable
and is not toxic. It is
stored in 55 gallon drums
in the storage area.

* WOT (Waste Oil Treatment)
used in the plant.

* The plant is not
a source of air pollution.
The plant is not a
source of air pollution.

Deto R. Zulueta 6-13-91

4

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

Photo 7

Has terminal, control area
 Drawn to a submersible
 T.P. View

Not all water well
 so to the bulk tanks
 Some 100 gal.

Also also bulk tanks

#

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.
 Photo 7

#

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

Photo 7

7

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

Sanitary waste to
 tank system. All new
 Containment - 5.10 + 12.20.1
 Data in table 10.15.

8

* Hinz wrote job area
Cont. describe 5 x 5 lot
Suggested
Haz + Non haz, empty
No cracks, underground
completely finished.
40 lbs + 100 yds
Drums OK.

Pool (looker) - dig
sell old to land 11.
Shower area - 20 x 20
bath - 5 x 10 to go to
Photo room
Ventilator - opened when
needed.

Tanks spilled
provided - date area
installed 1986.

* 038 - Hazardous
10,000 gal paint waste

0139

9:00 7-12-91 Rainy 75°

9

* Keenan Oil Site

Harold O'Connell

Site Activity

* Reg status - on spec oil
* Keenan owns 16 facilities
owned by Industrial Services
Dettenbaugh owns 17

No hazardous waste now

10-15 years oils + fuels
Wanted to keep up to
thought they would need permits.

* Netor oils - petroleum products
Kerosene - oil from changes

Runs through cleaning system
down to 1% water

Hydraulic + Crankcase oil
Segregate it. then mix.

Screen for chunks - lint, dust
chips - code filter - 100
and filter - linen etc. only
use there. For something from
tank.